Government of Western Australia
South Regional TAFE

Process: Working at Heights

Purpose

South Regional TAFE (the college) is committed to minimising risks associated with the requirements for employees and contractors to work at heights. The primary risks associated with working at heights are persons and objects falling and safe access to all work areas. This procedure provides the minimum requirement for all working at height activities conducted at the college.

Scope

This guideline is designed to provide information in regard to safety when working at heights. Working at heights can create particular hazards for those working above and persons below, as such College staff and contractors should be aware of their responsibilities and the correct procedures required for this type of work.

The Occupational Safety and Health Act 1984 and associated regulation provide specific requirements to ensure safety when working in this type of environment.

This guideline covers any person performing an activity or task which is deemed or considered to be working at height and may include where there is a risk of falling.

Definitions

Competent Person: A person who has acquired through training, qualification, experience or a combination of these, the knowledge and skills necessary for the task/s.

Risk Assessment: The overall process of estimating the magnitude of risk and deciding whether the risk is acceptable.

Working at heights: Any activity or task conducted where there is a risk of a person falling or an object falling on a person.

Job Safety Analysis (JSA) - This is a detailed statement of how work will be carried out in such a way as to either eliminate or minimise risks associated with working at height.

Responsibilities

The Facilities & Services Unit (F&SU) is responsible for:

- the implementation of this procedure in their area of responsibility and accountability;
- ensuring that only competent F&SU staff or F&SU engaged contractors are inducted to the local area where they are required to operate;
- the evaluation of contractors competency to work at heights
- ensuring that relevant F&SU staff and F&SU authorised and engaged contractors carry out work at heights in accordance with these procedures;
- identifying working at heights within all college workplaces;

- ensuring that all working at heights are adequately signposted;
- ensuring that the College Roof Access System Register is up to date at all times;
- ensuring that adequate resources are available to comply with the requirements of this procedure;
- keeping and maintaining records of all risk assessments, written entry permits, JSAs and permits to conduct working at heights under its control;
- ensuring that roof access points under its control
- maintenance of all relevant documentation relating to working at heights under its control.

Facilities & Services Staff and Contract Supervisors are responsible for:

- ensuring that required work permits and other documents are completed and signed that provide authority/permission for contractors to work at heights as defined by the college
- ensuring that a Working at Heights Permit is completed prior to work commencing;
- signing off on work undertaken and checking that all college property including access keys have been returned following the completion of authorised work.

Managers and Supervisors

- Risk assessments to be conducted before the commencement of work and at any time the scope of work changes or the risk of a fall increases.
- Ensure that all equipment purchased comply with the relevant Australian Standard, and is fit for its purpose.
- Encourage staff to wear non-slip footwear when regularly working at height.
- Provide adequate supervision and assistance.
- Provide training where necessary.
- Conduct an inspection and investigation in the case of an incident occurring.
- Retain a copy of all working at height risk assessments.

All Staff

- Use only equipment that is in good condition and is regularly serviced.
- Report any defects or problems with equipment to your Supervisor.
- Staff shall work in such a way that their centre of gravity is at all times contained within the load-bearing position of the ladder.

Contractors

Refer to the Business System "*Process: Contractor: Responsibilities of the Contractor*" and the "*Process: Contractor Induction."*

- It is accepted that contractors may supply their own equipment for working at height. However the requirement of this procedure will still apply.
- Provide appropriate resources to monitor contractors' compliance with these procedures.
- Notify their Facilities or Departmental contact of any injuries or accident.
- Retain a copy of all working at height risk assessments.

Planning

Planning and Legislative Requirements

Planning the work should be conducted before any such activity or task at heights is performed. This planning should include:

- Any necessary approval
- Completion of a risk assessment including, but not limited to:
- individual job factors
- the weather
- height and location
- people falling;
- objects falling;
- work occurring above or below other people;
- structural adequacy and integrity of supports where work is occurring from or on.

Consideration should also be given to the area of work:

- on a fragile or potential unstable surface;
- on a sloping or slippery surface;
- in close proximity to an edge;
- in proximity of a hole, shaft or pit which is of sufficient dimensions for a person to fall in.

Legislative requirements must be addressed when determining the selection of preventative measures.

Further information on the risk assessment process can be found in the OSH Risk Management Process Administrative Guidelines.

Responsibility

Management and Supervisors are responsible for ensuring that risk assessments are carried out for activities involving working at heights and that Safe Work Procedures or guidelines are developed specifically for these activities. They are also responsible for ensuring that all identified Personal Protective Clothing and Equipment (PPCE) is available and is in good order before work commences and that contractors and employees are trained in the correct use and any specific requirements of this PPCE.

Employees and contractors are responsible for using height safety equipment as instructed and only within the design parameters.

Principles

Roof Safety

Any access to the roof of a college building is controlled by Facilities.

It is acknowledged that there are some pieces of plant located on buildings that relate to academic activities carried out within the buildings.

- Each of these activities is to be registered with either the Facilities & Services Manager (F&SM) and a protocol for gaining access to the roof is to be developed.
- No new activities may be commenced on any roof without the written permission of a senior staff member from Facilities & Services or the relevant Manager

Risk Assessment

A risk assessment and hazard identification must be completed before commencing any type of work on roofs. This risk assessment must address, but is not limited to:

- Existing fall protection controls on the roof (eg handrails)
- The nature of the work or activity to be conducted on the roof
- The skills, qualifications and training of the person(s) that will be conducting the work or activity
- Weather conditions (e.g. rain, UV, reflected heat and glare)
- Any building engineering services that may be affected (eg air conditioning intakes)
- Work occurring above or below other people
- Objects falling
- Atmospheric contaminants from exhaust stacks
- Proximity to microwave towers

Written Authority (Permit to Work at Heights)

A Working at Height Permit (Appendix 1) must be completed by the person in direct control of the required work prior to the work being carried out at height.

Approval to work at heights shall be obtained from the person in direct control of the space and associated work before the work is commenced.

Approval shall not be granted until:

- a completed risk assessment of the work at heights has been provided by a competent person;
- measures to control the identified risks have been established and implemented;
- the competency of those required to work at heights has been verified;
- appropriate working at heights authority in respect to the particular site has been completed ;
- emergency procedures have been determined and are in place; and
- a standby person has been provided (where the element of risk requires that a standby person should be provided).

NOTE: No work shall be carried out at heights, or on the outside surface at heights if the work or any plant or equipment being used is likely to create a risk:

- to the health and safety of a person, or
- of fire or explosion.

The Working at Heights Permit must be displayed in a prominent place, usually adjacent to the access point. Prior to a written authority being cancelled, all tasks at height shall cease and all persons shall be removed from the space.

Scaffolds

All scaffolds are to be erected by experienced and certified contractors or staff at all times.

In addition, persons erecting scaffolding at the college must ensure:

- Safe access and egress to scaffolds
- If any building structure or access will be affected by the erection of the scaffold, consideration must be given to the new arrangements for access etc. to the building
- Full edge protection is provided on each working platform and access platform
- That access is restricted to authorised personnel

Elevating Work Platforms (EWP)

All EWPs must only be operated by competent persons fully trained in their use.

In addition persons using EWPs at the college must ensure;

- All persons working in the EWP has a fall arrest device connected to a dedicated anchor point in the basket
- The EWP is never used to gain access to an area. DO NOT leave the EWP while it is elevated.
- Never park the EWP on a slope
- A barricade is placed around the EWP and work area

Fall Arrest Equipment

Where a fall arrest device is being used this equipment is required to have all anchorage points for the device inspected before first use and on a regular basis so they are capable of supporting the loads. This inspection may only be conducted by a competent person.

Where the load-bearing capacity of anchor points is impaired, the anchor point is required to be taken out of service to prevent its use.

Only suitable equipment such as harness, safety line and other components shall be used in fall arrest systems. Where any part of the system shows signs of weakness and inability to perform the function as designed, it is not to be used.

Any person using fall arrest equipment is required to have training and be competent in its use and care.

Where a fall arrest systems is in use, an appropriate rescue plan is required in the event of a person falling.

Working from Ladders

Working from ladders greatly increases the chances of falling compared to other methods of working at heights, such as a work platform. It is important to realise that there are limits to the safe use of a ladder. Most accidents involving ladders occur because these limits are exceeded. As such working on ladders should be minimised and where appropriate alternate methods introduced.

Ladders are available in a variety of types, including portable and fixed.

When using portable ladders, the following points should be observed:

- The appropriate ladder should always be selected for the task (e.g. NEVER use a metal ladder for electrical work)
- All ladders should be adequately supported at the base and firmly attached where possible
- A ladder should never be ‘walked’ by the person standing on the ladder.

- One ladder, one person, and it is recommended that one should always have three points of contact (limbs) on the ladder at all times.
- NEVER climb higher than the third rung from the top of the ladder.
- Fully enclosed slip resistant footwear should always be worn when using ladders.
- Ladders must not be used on working platforms or be used to support a working platform
- The slope of a ladder is important to ensuring the ladder won't fall backwards. Position the ladder using 4 in 1, e.g. for every 2m in height, the ladder should extend out from the vertical surface 0.5m.
- When the ladder is in position, it should be at least 1m beyond the height of the task. Or in the case required to get off or on the ladder, it should extend 1m above the level being accessed.
- Ensure the top of the ladder is secured to prevent falling.
- If being used in a thoroughfare or where the danger of a collision with the ladder exists, the area around the ladder must be barricaded off.
- When selecting a position to place a ladder it must not be placed over a doorway. If there is no other alternative, appropriate warning and prevention mechanisms must be introduced to prevent someone coming through the door while the ladder is in position.

Falling Objects

Objects falling from heights can place those working near or below at risk. Consideration must be made for plant, equipment or other objects require for use at heights.

Where working at height requires objects such as equipment the following shall be required:

- safe means of raising and lowering plant, materials and debris in the place of work;
- a secure physical barrier to prevent objects falling freely from buildings or structures in or in the vicinity of the place of work;
- or measures to arrest the fall of objects;
- provision of appropriate personal protective equipment;
- barrier to close off the work area underneath or other means to prevent persons working or passing by underneath;

Implement Emergency Procedures

Managers are to work with staff and contractors to ensure appropriate emergency procedures are in place, and the procedures must cover provisions for rescue and first aid to comply with the College's first aid and emergency procedures.

Training (Working at Heights)

All persons with work activities related to working at heights shall be trained and assessed as competent to perform those activities. The training must be undertaken by an approved training provider and include at least the following core training elements:

- legislative requirements;
- definition of working at heights;
- the hazards associated with working at heights;
- risk assessment procedures;
- risk control measures;

- emergency procedures; and
- the selection, use, fit and maintenance of safety equipment.

Documentation & Record Keeping

The following documentation must be maintained by all areas with control over working at heights:

- The location of all working at heights access points;
- The risk assessments and the assigned risk control measures;
- Procedures used for conducting tasks at height;
- Training and competency records;
- Working at heights permits;
- Inspection, calibration and maintenance of safety equipment;
- Inspections and audits of working at heights access points and anchor points; and
- Reports related to any hazards or incidents associated with Working at Height must be entered into the College OSHSMS

Related documents

Policy: OSH Statement of Commitment and Intent

Related references

Working at Height Permit
OSH Regulations 1996
Worksafe WA – Fall Prevention for Scaffolders 2008
Code of Practice 2004 - Prevention of falls at Workplaces
Worksafe WA – Working at Heights Checklist
Worksafe WA – Working on roofs and in ceiling spaces

Government of Western Australia South Regional TAFE	**JOB SAFETY ANALYSIS and RISK ASSESSMENT** **COMPANY NAME:**

JSA Title:	**Date**:
Prepared By:	**Supervisor:**
Required Training:	1.
Required Personal Protective Equipment (PPE)	1.

STEP	JOB/TASK	HAZARD/S	INITIAL RISK RATING	SOLUTION/CONTROL MEASURE	RESIDUAL RISK Rating
	(List the tasks required to perform the job in the sequence they are carried out.)	*Against each task list the potential hazards that could cause injury when the task is performed*	*Use the College Risk Matrix to determine the risk rating*	*(List the control measures required to eliminate or minimise the risk of injury arising from the identified hazard)*	*Reassess the risk with the control measures in place.*
1.					
2.					
3.					
4.					
5.					

OSH RISK MATRIX

This document can be used to identify the level of risk and help to prioritise any control measures.

Consider the **consequences** and **likelihood** for each of the identified hazards and use the table to obtain the risk level.

Likelihood			Consequences: 1 – Insignificant Minor injury, low financial loss etc.	2 – Minor First Aid treatment, on-site release immediately contained, medium financial loss, etc.	3 – Serious Medical treatment required, On-site release contained with outside assistance, high financial loss.	4 – Disastrous Extensive permanent injury Loss of production capability, off-site release with no detrimental effect, major financial loss.	5 – Catastrophic Death. Toxic release off-site with detrimental effects, huge financial loss
5	Almost Certain	Expected to occur in most circumstances	5. Medium (M)	10. Substantial (S)	15. High (H)	20. Extreme (X)	25. Extreme (X)
4	Likely	Will probably occur in most circumstances	4. Low (L)	8. Medium (M)	12. Substantial (S)	16. High (H)	20. Extreme (X)
3	Possible	Might occur at some time	3. Low (L)	6. Medium(M)	9. Medium (M)	12. Substantial (S)	15. High (H)
2	Unlikely	Could occur at some time	2. Low (L)	4. Low (L)	6. Medium(M)	8. Medium (M)	10. Substantial (S)
1	Rare	May only occur in exceptional circumstances	1. Low (L)	2. Low (L)	3. Low (L)	4. Low (L)	5. Medium (M)

How to Prioritise the Risk Rating: Once the level of risk has been determined the following table may be of use in determining when to act to college the control measures.

Extreme	Immediate action required: must be managed by senior management with a detailed plan. Act immediately to mitigate the risk.	Either eliminate, substitute or implement engineering control measures. Remove the hazard at the source. An identified extreme risk does not allow scope for the use of Administrative or PPE controls even in the short term.
High	Senior Management attention required, detailed research and management plans involvement. Act immediately to mitigate the risk.	Either eliminate, substitute or implement engineering control measures. If these controls are not immediumiately accessible, set a timeframe for their implementation and establish interim risk reduction strategies for the period of the set timeframe. An achievable timeframe must be established to ensure that elimination, substitution or engineering controls are implemented. **NOTE:** Risk (and not cost) must be the primary consideration in determining the timeframe. A timeframe of greater than 6 months would generally not be acceptable for any hazard identified as high risk.
Substantial	Managers must sign off on the procedures and inform their Line Manager of their agreed actions.	Take reasonable steps to mitigate the risk. Until elimination, substitution or engineering controls can be implemented, college administrative or personal protective equipment controls. These "lower level" controls must not be considered permanent solutions. The time for which they are established must be based on risk. At the end of the time, if the risk has not been addressed by elimination, substitution or engineering controls a further risk assessment must be undertaken.
Medium	Managers must be informed and sign off on agreed procedures.	Take reasonable steps to mitigate and monitor the risks. Instigate permanent controls in the long term.
Low	Work Teams must take reasonable steps to mitigate and monitor the risk.	Manage by routine procedures. • Procedures must be documented. Permanent controls may be administrative in nature.

Hierarchy of Control	**Controls identified may be a mixture of the hierarchy in order to provide minimum operator exposure.**
Elimination	Eliminate the hazard.
Substitution	Provide an alternative that is capable of performing the same task and is safer to use.
Engineering Controls	Provide or construct a physical barrier or guard.
Administrative Controls	Develop policies, procedures practices and guidelines, in consultation with employees, to mitigate the risk. Provide training, instruction and supervision about the hazard.
Personal Protective Equipment	Personal equipment designed to protect the individual from the hazard.